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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.
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09/513,365 02/25/00 HARRIS C 15280-376100

HM22/0910
Townsend and Townsend and Crew LLP
Two Embarcadero Center 8th Floor
San Francisco CA 94111-3834

EXAMINER

NICKOL, G

ART UNIT	PAPER NUMBER
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1642

DATE MAILED:

09/10/01

Please find below and/or attached an Office communication concerning this application or proceeding.

Commissioner of Patents and Trademarks

Office Action Summary

Application No.

09/513,365

Applicant(s)

HARRIS ET AL.

Examiner

Gary B. Nickol Ph.D.

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --
Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 1 MONTH(S) FROM
THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 09 May 2001.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-57 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☐ Claim(s) _____ is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☒ Claim(s) 1-57 are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- | | |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s). _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____ | 6) <input checked="" type="checkbox"/> Other: <i>Fax sheet</i> . |

DETAILED ACTION

Claims **1-57** are pending in the application and are currently under prosecution.

Please Note: In an effort to enhance communication with our customers and reduce processing time, Group 1640 is running a Fax Response Pilot for Written Restriction Requirements. A dedicated Fax machine is in place to receive your responses. The Fax number is 703-308-4315. A Fax cover sheet is attached to this Office Action for your convenience. We encourage your participation in this Pilot program. If you have any questions or suggestions please contact Anthony Caputa, Ph.D., Supervisory Patent Examiner at 703-308-3995. Thank you in advance for allowing us to enhance our customer service. Please limit the use of this dedicated Fax number to responses to Written Restrictions.

Election/Restrictions

Restriction to one of the following inventions is required under 35 U.S.C. 121:

- I. Claims 1-9, 20-21 drawn to isolated nucleic acids, vectors, and host cells classified in class 536, subclass 23.1; class 435, subclass 320.1, 325.
- II. Claims 10-14, drawn to an isolated tumor suppressor polypeptide, p33ING2, classified in class 530, subclass 350.
- III. Claims 15-16, drawn to an antibody that binds to an amino acid sequence of SEQ ID NO:1, but does not bind to an amino acid sequence of SEQ ID NO:8, classified in class 530, subclass 387.1.
- IV. Claims 17-18, drawn to an antibody that binds to an amino acid sequence of SEQ ID NO:8, but not to SEQ ID NO:1 classified in class 530, subclass 387.1.

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- V. Claim 19, drawn to an antibody that binds to an amino acid sequence of SEQ ID NO:5, but does not bind to SEQ ID NO:8 classified in class 530, subclass 387.1.
- VI. Claims 22-29, drawn to a method for identifying a compound that modulates a tumor suppressor polypeptide, p33ING2, classified in class 435, subclass 4.
- VII. Claims 30-38, drawn to a method of inhibiting cellular proliferation comprising transducing a cell, classified in class 435, subclass 4, 69.1.
- VIII. Claims 39-49, drawn to a method for detecting the presence or absence of p33ING2 in mammalian tissue comprising detecting the level of p33ING2-specific reagents, classified in class 435, subclass 6, 7.1.
- IX. Claims 50-52, drawn to a method for determining a test amount of p33ING2 in mammalian tissue, classified in class 435, subclass 4, 6, 7.1.
- X. Claims 53-54, drawn to a method of detecting the presence or absence of p33ING1 in mammalian tissue, classified in class 435, subclass 7.1.
- XI. Claims 55-57, drawn to a method of determining a test amount of p33ING1 in mammalian tissue, classified in class 435, subclass 7.1.

The inventions are distinct, each from the other because of the following reasons:

The Inventions of Groups I-V represent separate and distinct products which are made by materially different methods, and are used in materially different methods which have different modes of operation, different functions and different effects.

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The inventions of Groups VI-XI are materially distinct methods which differ at least in objectives, method steps, reagents and/or dosages and/or schedules used, response variables, and criteria for success.

The invention of Group I and the methods of Groups VI-VII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § 806.05(h)]. In the instant case the nucleic acid product as claimed can be used in a materially different process such as affinity chromatography.

The invention of Group III and the methods of Groups VI-VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § 806.05(h)]. In the instant case the antibody product as claimed can be used in a materially different process such as affinity chromatography.

The invention of Group V and the method of Groups VIII are related as product and process of use. The inventions can be shown to be distinct if either or both of the following can be shown: (I) the process for using the product as claimed can be practiced with another materially different product or (ii) the product as claimed can be used in a materially different process of using that product [see *MPEP* § 806.05(h)]. In the instant case the antibody product as claimed can be used in a materially different process such as affinity chromatography.

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The invention of Group IV and the methods of Groups VI-XI are not at all related because the antibodies of Group IV are not used in any of the methods of Groups VI-XI.

The invention of Group II and the methods of Groups VI-XI are not at all related because the proteins of Group II are not used in any of the methods of Groups VI-XI.

Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification, restriction for examination purposes as indicated is proper. Furthermore, because these inventions are distinct for the reasons given above and the search required for one group is not required for another group, restriction for examination purposes as indicated is proper.

SPECIES ELECTION

Group VI (Claims 28 and 29) is generic to a plurality of disclosed patentably distinct species comprising the following:

- a) a cell which is a HCT116 human colon cancer cell line
- b) a cell which has the missense p33ING2 sequence of a polypeptide comprising SEQ ID NO:6

Group VII (Claims 36-38) is generic to a plurality of disclosed patentably distinct species comprising the following:

- a) a cell which is a HCT116 human colon cancer cell line
- b) a cell which has a missense endogenous p33ING2 phenotype
- c) a cell which has a null endogenous p33ING2 phenotype

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d) a cell which has the missense p33ING2 sequence of a polypeptide comprising SEQ ID NO:6

The above species represent separate and distinct cellular genotypes and phenotypes with different functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Group VIII (Claim 40) AND Group IX (Claim 52) are generic to a plurality of disclosed patentably distinct species comprising the following:

- a) a p33ING2-specific antibody
- b) a p33ING2-specific primer
- c) a p33ING2-specific nucleic acid probe

The above species represent separate and distinct molecules with different structures and functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Group VIII (Claim 41) is further generic to a plurality of disclosed patentably distinct species comprising the following nucleotide sequences:

- a) SEQ ID NO:7
- b) SEQ ID NO:2
- c) SEQ ID NO: 10

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Group VIII (Claims 48-49) is further generic to a plurality of disclosed patentably distinct species comprising the following antibodies:

- a) an antibody that binds to an amino acid sequence of SEQ ID NO:1, but does not bind to an amino acid sequence of SEQ ID NO:8
- b) an antibody that binds to an amino acid sequence of SEQ ID NO:5, but does not bind to SEQ ID NO:8

The products of the above species represent separate and distinct molecules with different structures and functions such that one species could not be interchanged with the other. As such, each species would require different searches and the consideration of different patentability issues.

Applicant is required under 35 U.S.C. 121 to elect a single disclosed species for prosecution on the merits to which the claims shall be restricted if no generic claim is finally held to be allowable.

Applicant is advised that a reply to this requirement must include an identification of the species that is elected consonant with this requirement, and a listing of all claims readable thereon, including any claims subsequently added. An argument that a claim is allowable or that all claims are generic is considered nonresponsive unless accompanied by an election.

Upon the allowance of a generic claim, applicant will be entitled to consideration of claims to additional species which are written in dependent form or otherwise include all the limitations of an allowed generic claim as provided by 37 CFR 1.141. If claims are added after

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the election, applicant must indicate which are readable upon the elected species. MPEP § 809.02(a).

Should applicant traverse on the ground that the species are not patentably distinct, applicant should submit evidence or identify such evidence now of record showing the species to be obvious variants or clearly admit on the record that this is the case. In either instance, if the examiner finds one of the inventions unpatentable over the prior art, the evidence or admission may be used in a rejection under 35 U.S.C. 103(a) of the other invention.

Applicant is reminded that upon the cancellation of claims to a non-elected invention, the inventorship must be amended in compliance with 37 CFR 1.48(b) if one or more of the currently named inventors is no longer an inventor of at least one claim remaining in the application. Any amendment of inventorship must be accompanied by a petition under 37 CFR 1.48(b) and by the fee required under 37 CFR 1.17(i).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gary B. Nickol Ph.D. whose telephone number is 703-305-7143. The examiner can normally be reached on M-F, 8:30-5:00 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Anthony Caputa can be reached on 703-308-3995. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-3014 for regular communications and 703-308-4242 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0196.


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Gary B. Nickol, Ph.D.
Examiner
Art Unit 1642

GBN
September 5, 2001



SUSAN VINCAR, PH.D.
PRIMARY EXAMINER



RESTRICTION ELECTION FACSIMILE TRANSMISSION

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